CLAIMS

1. Method of setting up a dialysis treatment in a dialysis machine (1) comprising the steps of:

• determining the conditions (U_0, TWL, DT) of a dialysis treatment adapted to a specific patient;

• determining a first function (U(t)) of a first quantity (U) characterizing the dialysis treatment as a function of time (t), the first function (U(t)) satisfying the conditions (U_0, TWL, DT) of the dialysis treatment and corresponding to a curve having a defined shape;

• determining a second function (C(t)) of a second quantity (C) characterizing the dialysis treatment, the second function (C(t)) being correlated with the first function (U(t)) by constants (M, N) determined experimentally and the second function (U(t)) corresponding to a curve having a shape of the same kind as the shape as the first curve.

2. Method according to claim 1, wherein the dialysis machine (1) comprises:

• an extracorporeal blood circuit (4) for the circulation of blood in a first compartment of a dialyzer (5) having a first second compartments separated by a semipermeable membrane (7),

• a dialysate circuit (3) for conveying a dialysate in the second compartment of the dialyzer (5), the dialysate having a defined concentration of salts which is correlated to the electrical conductivity (C) of the dialysate,

• an apparatus (2) for varying the concentration of salts in the dialysate during the dialysis treatment, and

• an ultrafiltration pump (9) with variable delivery (Q) for extracting plasma water from the blood circulated in the extracorporeal blood circuit (4) and causing a weight loss (TWL) during the dialysis treatment,

wherein the first quantity is the weight loss (U) in unit time which is correlated to the delivery (Q) of the ultrafiltration pump (9), and the second quantity is the conductivity (C) of the dialysate.

3. Method according to claim 2, wherein the constants (M, N) comprise a first constant (M), which relates a first value (U_0) of the weight loss (U) in unit time at the initial moment of the dialysis treatment to a value (C_0) of the conductivity (C) of the dialysate at the initial moment of the dialysis treatment, and a second constant (N) that relates the difference between the first value (U_0) and a third value (U_f) of the weight loss (U) in unit time at the final moment of the dialysis treatment to the difference between the second value (C_0) and a fourth value (C_f) of the conductivity (C) of the dialysate at the final moment of the dialysis treatment, the first and third values (U_0, U_f) being known from the first function.

4. Method according to claim 3, wherein the dialysis machine (1) comprises a device (6) for setting up the dialysis treatment comprising a microprocessor (11), data input (12, 13) and a screen (13), the method comprising the steps of:

- supplying a first group of functions (U(t,P)) characterizing the weight loss (U) in unit time as a function of time (t) and a variable parameter (P) that is correlated with intermediate values (U_i) of each function (U(t;P)) of the first group;
- selecting a subset of the group of functions (U(t;P)) imposing the conditions (U_0, TWL, DT) of the dialysis treatment adapted to a specific patient;
- assigning values to the parameter (P) and displaying the curves corresponding to the functions (U(t,P)) of the subset and to the respective values assigned to parameter (P); and
- selecting one of the functions ((U(t,P)) of the subset on the basis of the images of the curves.

5. Method according to claim 4, wherein the conditions (U_0, TWL, DT) of the dialysis treatment comprise the total weight loss (TWL), the dialysis time (DT) and the first value relative to the weight loss (U_0) in unit time at the initial moment of the dialysis treatment.

6. Method according to claim 4, wherein the parameter (P) is characteristic of the curvature of each first curve correlated with a respective first function ((U(t)) of the subset, and the determination of the second function (C(t)) comprises the steps of:

- supplying a second group of functions C(t,P)),
- determining a subset of second functions C(t,P)) that satisfy the correlation with the first function (U(t)) by means of the first and second constants (M, N) and are parameterised with the parameter (P), and
- supplying a second function (C(t)) having the same value of parameter (P) as the first function (U(t)).

7. Method according to claim 6, wherein each first curve is displayed relative to a Cartesian system (20) on the screen (13), the parameter (P) discriminating whether the curve is a straight line, whether the curve has its curvature oriented in one direction or whether the curve has its curvature oriented in the opposite direction, and determining the degree of curvature.

8. Method according to claim 6, comprising the step of supplying the image on the screen (13) of the second curve correlated with the said second function (C(t)).

9. Method according to claim 8, comprising the step of varying the value assigned to parameter (P) for altering the shape of the second curve and the respective second function C(t)).

10. Method according to one of claims 8 or 9, comprising the step of altering the second curve by varying the value of the initial conductivity (C_0).

11. Method according to one of the claims from 8 to 10, comprising the step of altering the second curve by varying the value of the final conductivity (C_f).